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Town of Milford

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July 31, 2013

Newton Tedder
US EPA—Region 1
5 Post Office Square—Suite 100, Mail Code—OEP06-4
Boston, MA 02109-3912.

Subject: 2013 MS4 Permit – Town of Milford – Comments

Dear Mr. Tedder:

Thank you for providing the Town of Milford with the opportunity to comment on the subject draft permit. The Town shares EPA's commitment to the protection of our natural resources and appreciates the effort that has been expended by EPA's staff for this purpose.

Our comments involve two major areas: scheduling and Water Quality technical requirements.

Timing:

We understand the logical approach EPA has put forward regarding the timing of implementation efforts. While many of the envisioned efforts are already underway in Milford, it will be difficult for us to meet schedules as proposed. Some of the areas we foresee as being difficult are:

1. NOI (1.1.7.2d) - The NOI filing anticipates a significant amount of detail regarding future BMP's and other implementable activities. These will likely be the basis for future evaluation of our program. To develop this plan, it is necessary to evaluate many additional aspects of water quality that are being introduced elsewhere through the draft permit. Since the NOI is required within 90 days of the start date of the permit, and since this start date and other permit requirements are unknown, it is difficult to assess the staff effort as well as the availability of consultant time, if required. We believe this date should be extended to 180 days.

2. Catchment Area Ranking and Investigations (2.3.4.9) - The permit requires the completion of the outfall inventory within one year of the permit date. However, identification of outfalls does not define catchment areas. Significant additional data is required to accomplish this. Until catchments are defined, rankings cannot be meaningfully completed. Further, evaluation and investigation of the catchments requires the understanding of interconnections, flow constraints and flow directions. In order to evaluate catchment areas, Milford will need an even better understanding of its more than 30 miles of storm sewers. Work to accomplish this is underway as part of a 6 year data gathering effort (planned completion during 2019) in which 200,000 linear feet of storm sewer, 1600 catch basins, and hundreds of drain manholes are being better defined though video and survey methods. Interconnections cannot be understood until this is completed.

Once the system is understood, investigations can be effectively conducted. While we agree that the proposed 10 year investigation time frame would be ideal, the time and effort involved in obtaining sufficient information to carry-out this program will likely add approximately 5 years to the proposed schedule. We request that the time frames related to this effort be increased as follows: Allow 5 years from permit inception for the completion of the ranking process and 15 years from permit inception for the completion of the investigations following the prioritizations identified in the present permit draft.

3. Review of Ordinances (2.3.6.6) – The staff, administrative, and public participation efforts anticipated are significant. The timing of reviews by independent boards, such as the Planning Board, is subject to existing workloads and scheduling. Further, given the possible need for Town Meeting action on proposed changes, the proposed two-year time frame may not be sufficient, especially if the finalization of the permit occurs at a time not in concert with legislatively defined schedules. We therefore recommend that these time frames be increased by at least 180 days.

Water Quality/ Bacteria TMDL (2.2):

Additional detail and effort anticipated by the draft permit is largely due to the incorporation of TMDL's into the permit. Currently, it is proposed that Milford is to be held subject to the bacteria TMDL. We object to this on several technical grounds.

We understand that the NPDES permit process is not the source for the TMDL for bacteria. However, expecting the town to expend significant effort and dollars based upon the bacteria TMDL as it currently has been formulated and exists is inappropriate. It is well understood that this TMDL, at least as it relates to the Souhegan River in Milford, is based upon limited and outdated data obtained by a much appreciated lay-monitoring group whose work has not been quality controlled for this purpose. While we commend the group for its efforts and appreciate the work of the individual volunteers, we note that the group has not worked with the DES Volunteer River Assessment Program (VRAP) for training and QA/QC certification. The level of data thus obtained does not rise to the scientific levels typically required by EPA. Further, the application of the TMDL fails to consider the tenants of Water Quality Standards incorporated with the Clean Water Act and New Hampshire statute which emphasize "naturally occurring conditions" as being beyond the reach of regulation. 40 CFR 130.2(i) defines a TMDL as the sum of the waste load allocation (WLA), the load allocation (LA), and a margin of safety

(MOS). This requires that major sources, including natural sources, are understood and incorporated into the TMDL. A quick modeling of the Souhegan River reveals that the water quality criterion for bacteria is not met during low flow or 7Q10 and greater flow conditions due to inputs from natural sources, such as birds and other resident wildlife. Further, other unregulated watershed sources, such as agriculture and privately owned commercial and industrial outfalls, contribute bacteria. The watershed includes several agricultural operations with hundreds of acres of managed land with likely contributions that are not incorporated into the conceptual model being applied. It is known that agricultural operations within Milford as well as in upstream communities commonly apply manure to cultivated soils as normal agricultural activity. Yet this is a largely unregulated activity. The data used in the development of the TMDL, further, does not support stormwater as being the unique source of bacteria in that most in-stream samples are obtained during lower flow conditions and often without precursor rainfalls occurring within 24 to 48 hours of the sampling. The permit is silent on the means of implementing controls or expending resources based upon naturally occurring watershed sources or sources that are not regulated. In fact, the water quality standard for bacteria is not applicable as a result of naturally occurring sources (NHRSA 485-A:8 –II. "Class B waters shall be of the second highest quality and shall have no objectionable physical characteristics, shall contain a dissolved oxygen content of at least 75 percent of saturation, and shall contain not more than either a geometric mean based on at least 3 samples obtained over a 60-day period of 126 Escherichia coli per 100 milliliters, or greater than 406 Escherichia coli per 100 milliliters in any one sample; and for designated beach areas shall contain not more than a geometric mean based on at least 3 samples obtained over a 60-day period of 47 Escherichia coli per 100 milliliters, or 88 Escherichia coli per 100 milliliters in any one sample; **unless naturally occurring"** (emphasis added)). In concept, DES has addressed naturally occurring bacteria as part of the TMDL "MOS". However, given the current NH statute and water quality standards, naturally occurring bacteria are exempted from determination of attainment of water quality standards. Given the broad occurrence of naturally occurring bacteria, a generalized MOS is not sufficient for establishment of a TMDL requiring a percentage reduction of bacteria. This is a critical flaw.

Since there is little or no specific data regarding watershed sources of bacteria, NHDES and EPA have elected to develop a TMDL based upon raw sampling data and Water Quality Standards. While undefined as to how to implement the necessary controls, EPA and NHDES have elected to incorporate the equivalent of the "Percent Reduction Method". However, the percent reduction method is based upon the assumption that there is a 1:1 relationship between the reduction in pollution loading from the source and the resulting water column water quality. This is not the case for bacteria which cannot be modeled as a conservative pollutant. Bacteria have a natural die-off rate which must be recognized in a loading assessment. In-stream sampling and assessment attempts to address this issue. However, communities are expected to incur significant costs based upon this approximation which provides minimal control guidance. This represents a flaw in applying the percent reduction methodology.

Another requirement of the application of the "Percent Reduction" approach is that sources must be identified so that there is knowledge as to the practical effectiveness of the TMDL. Reasonable and practicable controls cannot be defined without respect for all significant sources with due consideration to naturally occurring contributions, unregulated sources, and watershed inputs that are outside of

corporate boundaries of the town. The TMDL for bacteria, therefore, presents unattainable goals which potentially place the Town of Milford in immediate violation of the proposed permit, and the permit does not provide a shield from enforcement.

Again, we appreciate the difficulty of addressing bacteria TMDL's and the limited quantity and quality of data that DES had at its disposal during the development of the TMDL. However, the TMDL presented for bacteria has the following flaws:

1) It fails to meet EPA's TMDL definitions (40 CFR 130.2(i)) and requirements by not adequately assessing WLA, LA, and MOS;

2) It is not based upon adequate data;

3) It does not recognize "naturally occurring" sources or non-regulated watershed sources;

4) It treats bacteria as a conservative pollutant thereby ignoring die-off;

5) It does not define watershed inputs that initiate from outside of Milford's corporate bounds;

6) It establishes specific percent reduction goals for stormwater management that are not sufficiently defined or supported to allow planning and implementation of successful management strategies. Basic BMP implementation may not be sufficient to attain in-stream standards and the identification of these as "minimum" leaves open the possibility for the requirement of extreme and expensive measures and enforcement actions.

We understand EPA's need to issue NPDES permits with emphasis on assuring that discharges do not result in further degradation of non-attainment segments. Since this presumes an accurate understanding of in-situ water quality, we believe that implementing water quality based permits is not reasonable until the water quality is sufficiently understood. Clean Water Act 303(b) Reports to Congress have presented estimates of non-attainment water bodies since the 1970's. Most of these have been based upon the best judgments of state water quality staff. To the extent that this has been a traditional approach, there has been little or no input into the process by the public. Without appropriate public input the value of the 303(d) lists are limited. While useful as planning tools, without sufficient technical basis, these reports and the 303(d) lists may not rise to the level required for implementation of costly regulations. The limited data along with quality questions furthers the practice of using available information for assessing the Souhegan River that is not substantially different than the "best judgment" or best guess approach. It is EPA's and DES's responsibility to obtain the needed water quality information. Insufficient funding of these agencies does not translate into the requirement for the regulated permittees to expend funds without sufficient basis.

We therefore request that references to the bacteria TMDL be removed from the permit until the above TMDL issues are resolved.

NHDES is currently finalizing its 2012 -303(d) list. This process could allow many of the above issues to be further explored and possibly resolved. However, the comment period on the 2012 list has expired

and DES will be finalizing the list without the benefit of further comments. Accordingly, Milford requests that EPA not approve the list until these issues are resolved. EPA has 30 days to reject the list once it is submitted by DES during which time EPA should remand the list to DES for reconsideration and DES should reopen the comment period upon its reconsideration and revision of the list. Whether this suggestion is followed or not, EPA should not issue the permit with specific TMDL's incorporated until the TMDL's are properly established - even if this means that the TMDL for the Souhegan River in Milford is not incorporated in the MS4 permit until the next permitting cycle.

Thank you again for your considerations and feel free to contact Fred Elkind or me for clarifications.

Respectfully,

Guy Scaife

Town Administrator

cc. Fred Elkind, Environmental Coordinator